

### REMARKS/ARGUMENTS

This application was subject to election of species in the prior Office Action mailed February 16, 2005. In response thereto, applicants elected the species wherein the requisite polyalkene, enophile and free radical inhibitor of the claimed process were polyisobutene, maleic anhydride and unsubstituted phenothiazine, respectively. Applicants further asserted that all claims read on the elected species. It is now alleged that Applicants assertion was not correct, and that dependent claims 10, 11 and 14 to 17 do not read on the elected species. These claims have, therefore, been withdrawn from consideration. Applicants submit that the withdrawal from consideration of these claims is improper and respectfully request that said claims be considered.

Specifically, it was alleged that claims 10, 11 and 14 through 17 do not read on the elected species because these claims require the presence of sulfonic acid, in addition to the polyalkene, enophile and phenothiazine (claims 10 and 11), or the further step of reacting the product formed via the process of any of claims 1 through 9, with a nucleophilic reactant, such as a polyamine (claims 14 through 17). However, the process of each of claims 10, 11 and 14 through 17, like those of claims 1 through 9, require the reaction of a polyalkene, which could be polyisobutene, an enophile, which could be maleic anhydride, in the presence of a free radical inhibitor, which could be phenothiazine. Therefore, these claims do read on the elected species. Election of species does not exclude components in addition to the noted polyalkene, enophile and free radical inhibitor; election simply identifies a species representing these essential components to ease examination. If the intention is to assert that the further presence of sulfonic acid and/or further reaction with a nucleophile amounts to the claiming of patentably distinct inventions, then a requirement for restriction should be presented, in addition to the requirement for election of species. Absent a restriction requirement, applicants submit that no claim should have been withdrawn from consideration.

This application contains claims 1 through 17. Claims 2 through 17 are original claims. Claim 1 has been amended to require that the polymer used in the process consists essentially of polyalkene having  $M_n$  of from about 300 to 5000, and a terminal vinylidene content of at least 30%. The specification makes clear that the invention is directed to a process for thermally reacting such a polyalkene with an enophile, in the absence of halogen. No mention is made of polymers other than the noted polyalkenes, and all examples contained such polyalkenes as the sole polymer. Therefore, applicants submit that the specification makes clear that no other

polymer components were intended to be present, and that the specification as a whole, therefore supports the present amendment to the claim.

As noted above, the invention is directed to a process for thermally reacting a highly reactive polyalkene with an enophile, in a batch reaction, and in the absence of halogen (e.g. chlorine) while reducing the amount of sediment formed as a byproduct. In the process of the present invention, sediment formation is reduced by thermally reacting the highly reactive polyalkene and enophile in the presence of a free radical inhibitor (e.g., phenothiazine).

Claims 1 through 9 were rejected under 35 USC Section 102(b) for being anticipated by U.S. Patent No. 5,647,819 to Sivik et al. (hereinafter "the Sivik et al. patent"). The Sivik et al. patent is directed to carboxylic compositions prepared by reacting (a) an alpha-olefin polymer and (b) an alpha, beta-monounsaturated dicarboxylic acid or anhydride in the presence of (c) a "low molecular weight terpolymer derived from ethylene, alpha olefin and non-conjugated diene. The Sivik et al. patent teaches that the presence of the terpolymer, which is more reactive than the alpha-olefin polymer, allegedly allows the reaction to more easily occur in the absence of, or in the presence of reduced amounts of halogen. Each of Examples 3, 5 and 6 of the Sivik et al. patent describe the reaction of (a), (b) and (c) in the presence of phenothiazine, although phenothiazine is not discussed elsewhere in the patent, and the reason for adding phenothiazine to the reaction mixture is not disclosed.

The presence of the terpolymer, as described *supra*, is an essential feature of the invention claimed in the Sivik et al. patent. The presence of such a terpolymer is expressly excluded from the process of the present invention, in which polymer reactant "consists essentially of" highly reactive polyalkene within a given molecular weight range. Therefore, applicants submit that the Sivik et al. patent fails to anticipate the amended claims under Section 102(b).

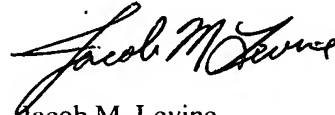
Claims 1 through 9, 12 and 13 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 through 24 of U.S. Application Serial No. 10/600,677 (allowed February 10, 2005). Applicants submit herewith a terminal disclaimer disclaiming the terminal portion of any patent issuing on the present application that extends beyond the normal expiration date of any patent issuing on U.S.

Appln. No. 10/600,302  
Amdt. dated May 15, 2005  
Reply to Office Action of April 18, 2005

Application Serial No. 10/600,677. The filing of this Terminal Disclaimer renders moot this ground for rejection.

Based upon the foregoing, applicants submit that the invention now claimed is not anticipated by the cited reference. Applicants therefore request that the rejection presented under Section 102(b) be withdrawn and that the application now be passed to issue.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Jacob M. Levine". The signature is fluid and cursive, with the first name "Jacob" being more prominent.

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